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Premium Levels and Trends in Private Health Insurance Plans

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Table of Contents

Introduction

Massachusetts has higher health insurance premiums than the U.S. average, and for at least the past five years premiums have grown at a faster rate. Nationally, there have been at least three major consequences of fast-rising premiums. First, employee contributions to coverage have grown as employers strive to control benefits costs.[1] Second, high premium growth has discouraged job and employment growth, including especially the creation of jobs that offer health benefits.[2] Both trends have contributed to rising rates of uninsured.[3] Finally, employers and individuals have attempted to "buy down" coverage, purchasing insurance products that require greater cost sharing and less rich benefits with the obvious consequence of rising consumer out-of-pocket costs.

This report discusses findings related to beneficiary demographics in the Massachusetts commercial markets, and the non-medical expense charges and total premiums paid by those beneficiaries for health insurance.[4] The findings are based primarily on premium, claims, membership, and non-medical expense data by insurance market segment provided by health insurance carriers writing business in the Commonwealth.[5,6]

A. Beneficiaries

The findings in this section are based on membership data provided by insurance carriers in Massachusetts and include both resident and non-resident members of Massachusetts policies. The data span calendar years that include the merging of the individual and small group markets under Massachusetts' 2006 reforms. When findings appear to be influenced by the 2006 reforms, it is noted. Note that the purpose of this report is not to track the number of uninsured, but rather to analyze trends in premiums and claims of Massachusetts policies.

There were significant differences among populations in the various market segments. On average plan members in the individual segment were older than those in the group segments and covered fewer dependents per contract, including children under age 20.

1. Membership by Segment[7]

- Annual enrollment declined in all insured group segments from 2006 to 2008, but increased in the individual and self-insured segments. In 2008, approximately 70,000 members (individuals, workers, and dependents) were insured in the individual segment, 690,000 in small groups, 780,000 in mid-size groups, 540,000 in large groups, and 1,940,000 in self-insured groups (see Appendix, Figure A.1 and Table A.1). The size of each segment may differ slightly from other reported statistics.[8] This is apparently due to the exclusion of Commonwealth Care and one carrier with significant self-insured enrollment from the study. Furthermore, this report includes both resident and non-resident members of Massachusetts policies.
- The average size of insured small and large groups (measured as the number of subscribers per employer) decreased from 2007 to 2008. In contrast, the average size of self-insured

groups increased from 2006 to 2007. In 2008, on average, nine workers were insured in small groups, about 160 in mid-size groups, and nearly 1,700 in large groups. Self-insured employer groups included, on average, 4,150 enrolled employees (see Appendix, Figure A.2).[9]

- The average size of insured groups varied significantly among carriers. For example, across carriers in the small group segment, the average size of insured groups ranged from three to 29 in 2008 (data not shown).

2. Age and Gender

This section discusses the age and gender of each insurance segment. Age is an important factor in health insurance premiums because it impacts the claims experience of each segment, and is an allowable rating factor in all segments, though the use of age as a rating variable is limited in the individual and small group segments. Gender is also important due to its impact on the underlying claims experience. In addition, gender is an allowable rating factor in the mid-size group and large group segments, but not the individual and small group segments.

- The individual insurance segment was significantly older on average than the group segments (see Appendix, Figure A.3). The individual insurance segment covered relatively few children ages 0 to 19 (largely as dependents) and relatively more adults ages 60 to 64, potentially including early retirees not yet eligible for Medicare (Table A.2). The difference in average age between individual members and group members was enough to result in individuals being rated one (five-year) age band above group enrollees on average, with commensurately higher premiums.
- Despite the higher average age of the individual segment, there was significant membership in the 20 to 29 age band, many enrolled in Young Adult Plans for those ages 18 to 26. In 2008 there were, on average, just under 4,000 members enrolled monthly in Young Adult Plans.[10]
- In all insurance market segments, the average age of enrollees increased from 2006 to 2008, with small groups experiencing the largest (but still very small) increase—from 33.3 years in 2006, to 33.7 years in 2008 (see Appendix, Figure A.3).[11]
- With Massachusetts' insurance market reforms, the average age of adults ages 20 and older in the individual segment declined from 45 to 43 years old (data not shown). In part, this reflects a large increase in the number of members ages 20 to 29, which nearly doubled from 2007 to 2008. Nevertheless, while the average age of adults declined, the proportion of members ages 0 to 19 declined also. As a result, the average age of the individual segment as a whole was stable.
- The individual and large group segments cover a larger share of females than the small group and mid-size group segments (see Appendix, Table A.2).

3. Contract Size[12]

- In each insurance market segment, the average size of enrolled families (measured as the number of members per contract) was generally consistent from 2006 to 2008 (see Appendix, Figure A.4). Only in the individual market did enrolled family size decline, suggesting that single adults accounted for a relatively large share of new enrollment.
- Consistent with fewer children in individual coverage, the average contract size was significantly greater in the group segments than in the individual segment. Within the group segments, the average contract size was greatest in the large group segment, and smallest in the small group segment.

4. Geographic Area

- Geographic area is an important factor in determining health insurance premiums. All insurance segments allow premium rates to vary based on the location of the employer or covered members, though the individual and small group segments limit the variation permitted. The variation in premium typically reflects differences in the contractual reimbursement rates and underlying utilization of providers in the different geographic areas.
- Nearly half of large group members were covered through employer groups based in the Boston Metro area (see Appendix, Figure A.5).
- In contrast, small and mid-size employer groups, as well as individual enrollees, were more likely to be located outside of the Boston Metro area, in the Central, Metro West, Northeast, and the Southeast regions (including the Cape and Islands).

5. Industry

- Industry is another important factor due to its use in setting premium rates. Industry is an allowable rating factor in all insurance segments. However, it is typically not used in the individual insurance segment.
- Government, education, and health services accounted for more than half of insured large group enrollees (54 percent) in 2008 (see Appendix, Table A.3).
- In contrast, small group enrollment was relatively concentrated in construction, retail, and several of the smaller service industries.

B. Non-Medical Expenses

- In total, carriers used approximately 89 percent of 2008 premiums to fund claims on behalf of members. This proportion, called a loss ratio, was much higher in the individual market than in the group markets. The remaining 11 percent of premium, called retention, is the amount available for carriers to fund non-medical expenses and contributions to surplus or profit. In the individual insurance segment, loss ratios in post-merger individual products varied by carrier, ranging from 79 percent to 118 percent in 2008; most carriers experienced

loss ratios in excess of 100 percent in post-merger individual products, resulting in an average loss ratio of 112 percent in these products.

- Massachusetts reforms merged the individual and small group markets and limited the difference in premiums that can be charged to individuals and small groups. To offset losses on individuals, therefore, some carriers have needed to charge higher premiums to small groups. The amount of additional premium charged to small groups by a given carrier would depend on the claims experience of the individuals that are covered and the size of the carrier's individual enrollment relative to its small group enrollment.
- In the group market, loss ratios were slightly higher for large groups (by 3.5 percentage points) than for small groups. The difference between loss ratios in the merged market and large group market narrowed in 2008, reflecting a very high average loss ratio (112 percent) for individuals in 2008.
- In 2009, general administrative expense accounted for six to eight percent of premium across the segments (roughly 60 percent of the difference between premiums and claims, called pricing retention). Surplus or profit accounted for two to three percent of premium (25 percent of retention), and commissions accounted for one to three percent of premium (15 percent of retention).

1. Historical Administrative Expenses and Loss Ratios

- Total administrative expenses per member per month (PMPM) increased from 2002 to 2006 at an average rate of 13.2 percent per year, and from 2006 to 2008 at an average rate of 1.9 percent per year, resulting in an average rate of 9.3 percent per year over the entire period (see Appendix, Table B.1)—similar to the growth in premium PMPM (data not shown).[13] While some administrative expenses may increase at the rate of premium (such as commissions, which are paid as a percent of premium), it is not expected that total administrative expenses would increase as fast as premium over the long term. In the most recent two years, administrative expenses grew more slowly than in previous periods and more slowly than the premium PMPM. Total administrative expenses PMPM grew 2.5 percent in 2007 and 1.4 percent in 2008.
- From 2002 to 2008, carriers used an average of 86 cents per dollar of premium to fund claims on behalf of members. On average, 88 cents of each dollar of premium was used to pay claims in 2008. Across carriers, this percentage ranged from 75 to 91 cents (see Appendix, Table B.2).
- While the small group loss ratio declined by 0.5 percentage points (from 86.6 percent in 2007 to 86.1 percent in 2008), claims exceeded premiums in the post-merger individual segment, increasing the merged market total loss ratio 1.2 percentage points (to 88.1 percent) from 2007 to 2008 (see Appendix, Table B.3 and Figure B.1).[14]
- The difference between merged market and large group loss ratios narrowed in 2008. In 2007, there was a 3.1 percentage point difference between the loss ratios of the merged market

(86.9 percent) and the large group segment (90.0 percent). In 2008, this differential shrank to 1.5 percentage points, largely reflecting an increase in the merged market loss ratio (to 88.1 percent). The higher merged market loss ratio was driven by the 112 percent loss ratio on individuals in 2008.[15]

- The individual and small group markets are merged with limitations on premium differences between individuals and small groups. Therefore, when losses on individual coverage occur, carriers may need to increase premiums for small groups as well as individuals. Reflecting the difference between the loss ratios for small groups and individuals in 2008, carriers would have had to increase small group premiums 2.3 percent in the merged market to achieve the same loss ratio they would have in a non-merged market. The impact on small group premiums would be larger if either (a) individuals become a larger proportion of the merged market, but the difference between small group and individual loss ratios persists; or (b) individuals continue to account for the same share of the market, but individual loss ratios increase relative to small group loss ratios. It is not known how much carriers actually increased their 2008 premiums due to the markets having been merged.

2. Carrier Pricing

- Pricing retention, the amount carriers charge to fund general administrative expenses, commissions, and contribution to surplus/profit (also equal to the difference between the premium charged and the expected claims expense), was generally higher for smaller group sizes, both as a percentage of premium and PMPM (see Appendix, Figure B.2).
- The difference in retention between small groups and large groups narrowed from 2006 to 2008. On average, retention PMPM grew faster for large groups (8.0 percent) than small groups (1.4 percent) from 2006 to 2008, driving a narrower retention differential (see Appendix, Table B.4).
- Retention was comprised of roughly 25 percent contribution to surplus or profit, 15 percent commissions, and 60 percent general administrative expense in all insured segments.
- In second quarter 2009, average self-insured fees were approximately $26 PMPM, while average retention for insured groups ranged from roughly $40 to $50 PMPM (data not shown).

C. Premium Trends

This section discusses premium trends by health insurance segment over the study period, focusing on three analyses: most popular benefit plans, lowest-cost benefit plans, and aggregate historical premium trends.

On average, large groups purchase richer benefits than mid-size or small groups. From 2006 to 2008, large group premiums consistently exceeded mid-size and small group premiums. When adjusted to equivalent demographics, geographic area, and benefits, smaller groups pay higher premiums and

have experienced higher average premium trends than mid-size and large groups. Premium increases for specific employers may vary significantly from the average.

1. Most Popular Plans

- The most popular benefits were richer for groups than individuals, and richer for large groups than mid-size and small groups (see Appendix, Table C.1).
- Copayments generally increased from 2006 to 2008. For example, in the small group segment the median primary care physician (PCP) copayment increased from $10 to $20. Similarly, the actuarial value of the median plan decreased.[16] In the small group segment, the weighted average actuarial value declined from 0.90 at the beginning of 2005, to 0.87 at the end of 2008 (see Appendix, Table C.2).
- The most popular group plans generally included no deductibles, whereas the median most popular individual plan generally included a $2,000 deductible.
- From 2006 to 2008, large group premiums for the most popular plan were generally higher than in other insurance market segments, reflecting richer benefits. Conversely, individual premiums were lower because benefits were less rich (see Appendix, Figure C.1).
- The large increase in individual premiums from first quarter 2008 to third quarter 2008 coincided with significant new entry of individuals into the merged market. Later entrants to the market apparently chose richer benefits than early entrants, driving up the median single premium. Two carriers reported a change in the most popular individual product at 2008 Q2, and another reported a change at 2008 Q3. For all three carriers, their most popular individual product became a richer benefit design. For example, one carrier's most popular individual product at 2008 Q1 included a $2,000 deductible, while its most popular individual product at 2008 Q2 included only a $1,000 deductible.
- Post-merger for individuals, average single premiums for the most popular products grew more than 30 percent annually as later entrants chose richer benefit designs. In contrast, average single premiums for the most popular group products grew by 6 to 8 percent.
- In each insurance market segment, family premiums were roughly 2.7 times the single premium in all years from 2006 to 2008 (data not shown).
- A somewhat larger percentage of members in small groups (17 percent) were enrolled in the most popular plan in 2008, compared with either mid-size groups (7 percent) or large groups (13 percent) (see Appendix, Table C.3). The percentage of small group members enrolled in the most popular plan declined from 30 percent at the beginning of 2005 to 17 percent at the end of 2008. Similarly in mid-size groups, enrollment in the most popular plan declined from 11 percent to 7 percent. Large group enrollment in the most popular plan increased slightly, from 12 percent to 13 percent.

2. Lowest-Cost Plans[17]

- With the introduction of new low-cost plan options in 2007 and 2008, the median and high actuarial values of comprehensive lowest-cost products in all segments declined (see Appendix, Table C.4).
- In 2008, most of the lowest-cost options that would have met current Minimum Creditable Coverage (MCC) requirements included a $2,000 deductible, the maximum allowable under the current MCC requirements if the plan is not eligible for a health savings account.[18]
- The lowest-cost small group premium fell markedly in July 2007, when carriers introduced new low-cost products in the newly merged market (see Appendix, Figure C.2). These new products may have been introduced as Bronze coverage products made available to individuals through the Health Connector's Commonwealth Choice program (as many of the carriers in the study participate in Commonwealth Choice) or for other strategic reasons. Commonwealth Choice product offerings are made available both through the Connector and to individuals and small employers through the carriers' other merged market distribution channels. Typically these new low-cost products were made available to larger groups as well.
- Small groups appear to have the lowest-cost options available since the market merged (see Appendix, Figure C.2). After the market merged, the median lowest-cost plan available to small groups was less than that available to mid-size or large groups. This was due in part to one carrier that did not offer its lowest-cost small group plan design to larger groups.[19]
- In each group insurance segment, the most popular plan was not the lowest-cost plan (see Appendix, Figure C.3). Only in the individual insurance segment were some carriers' lowest-cost plans also their most popular plans (data not shown).

3. Historical Premium Trends

- Overall, individual premiums declined significantly in 2008 (from $447 PMPM in 2007 to $396 PMPM in 2008) due to the shift in membership toward lower-premium products in the merged market (see Appendix, Figure C.4). However, premiums for individuals in pre-merger products continued to increase.
- While the individual premiums for the most popular post-merger products increased at an annual rate of 30 percent due to an increase in benefits in these products, they represented only 17 percent of enrollment. On average, individual premiums in post-merger products decreased from 2007 to 2008.
- Among group segments, large groups paid the highest unadjusted premium PMPM and saw the greatest premium growth from 2006 to 2008 (see Appendix, Table C.5).
- Average benefits among large groups increased slightly from 2006 to 2008 (by less than one percent), as large group enrollment fell nearly 11 percent.

- In general, carriers charge small groups greater premiums for the same or equal benefits, compared with larger groups with similar demographics. (see Appendix, Table C.5) In 2008, small group premiums PMPM, adjusted to consistent demographics, geographic area, and benefits, exceeded mid-size group premiums by 4.9 percent and exceeded large group premiums by 5.8 percent. Of the 5.8 percent difference in premiums between the small group and large group segments, 3.7 percentage points were due to higher claims expense, and 2.1 percentage points were due to higher retention expense (derived from data shown in Figure C.5).[20]
- The trend in adjusted premiums was higher for small groups than mid-size or large groups (see Appendix, Table C.5).[21] From 2007 to 2008, the adjusted premium trends averaged 5.8 percent, 4.8 percent, and 5.4 percent, respectively for small groups, mid-size groups, and large groups.[22]

4. Variation in Premium Trends

- For any specific employer group, premium trends might vary substantially from the average. Premium volatility due to changes in subscriber demographics can be especially large for small groups, where each subscriber represents a significant percentage of the total group. For example, if two employees in a sample six-subscriber small group age into a higher age band, premiums could rise 10 percent at renewal, nearly four percentage points more than a six-percent baseline premium trend (see Appendix, Table C.6).
- Premium volatility also may occur due to changes in the number of enrolled subscribers in the group because most carriers vary premium rates based in part on the size of the group. For example, if an employee of roughly average age with single coverage leaves the sample six-subscriber small group and another employee with family coverage ages into the next five-year age band, both single and family premiums for the group could increase nearly 18 percent at renewal, nearly 12 percentage points above a six-percent baseline premium trend.
- Constructing realistic scenarios illustrates how much premium volatility can vary for small groups of different sizes as a result of rating rules and practice in the small group segment. In Scenario 1 (see Appendix, Table C.6), roughly 30 percent of the employees in a six-subscriber group and a 20-subscriber group, respectively, age into a higher age band. The impact of this change on each group is similar because premium adjustments for age do not vary based on the size of the small group. However, if the average age in either group is significantly higher or lower than the average among all small groups, either group could experience additional variation due to rating band limitations in the small group segment. In Scenarios 2 and 3, each employer loses roughly 15 percent of employees. The six-subscriber group is charged a higher premium based on the new, smaller size of the group, but the 20-subscriber group is not affected because the size adjustment for a 17-subscriber group is often the same as a 20-subscriber group. Scenario 4 shows that some groups will experience rate increases less than the average, for example, due to the retirement of an employee who is replaced by a younger worker.

- Finally, premium increases may vary from the average when a carrier changes its rating factors (for example, for geographic area or industry) or its product design relativities (for example, a carrier may increase the cost of a specific product design, such as its $10 office visit copayment product design, by an amount that is higher or lower than its baseline premium increase, while other product designs may receive only the baseline premium increase). Carriers periodically review rating factors and may realign them to more closely reflect the difference in cost experience or competitive pressures. In that case, only employer groups insured by that carrier in that geographic area or industry or with that product design would experience the change. For example, between April 2007 and April 2009, most carriers changed their geographic area factors in the small group segment. The premium impact by region varied from -2.5 percent (in the West) to +1.1 percent (in Metro West), on average across all carriers in the region. However, groups covered by specific carriers in certain geographic areas experienced premium impacts ranging from -14.2 percent to +20.4 percent due to changes in geographic area factors over the two-year period.

Methodology and Process

Oliver Wyman developed Section I of a data request that was reviewed by the Division of Health Care Finance and Policy (DHCFP) and its consultants and forwarded to the participating carriers. The carriers were selected based on membership volume as reported to DHCFP. This data request specified the content for data containing premium, claims, membership, and pricing data. For this study, we requested that carriers provide data on their commercial medical products for all group sizes including individuals. Products that are specifically excluded from this study are: Medicare Advantage, Commonwealth Care, Medicaid, Medicare supplement, FEHBP, and non-medical (e.g., dental) lines of business.

Carriers that responded to the data request included the following:

- Aetna Health, Inc.
- Aetna Life Insurance Company
- Blue Cross Blue Shield of Massachusetts, Inc.
- Blue Cross Blue Shield of Massachusetts HMO Blue, Inc.
- CIGNA HealthCare of Massachusetts, Inc.
- ConnectiCare of Massachusetts, Inc.
- Fallon Community Health Plan
- Harvard Pilgrim Health Care, Inc.
- Health New England, Inc.
- Mid-West National Life Insurance Company of Tennessee

- Neighborhood Health Plan
- The Chesapeake Life Insurance Company
- The MEGA Life and Health Insurance Company
- Tufts Associated Health Maintenance Organization, Inc. (d/b/a Tufts Health Plan)
- UnitedHealthcare of New England, Inc.

Oliver Wyman's initial analysis of the data revealed issues with several of the datasets provided. After further investigation by Oliver Wyman and the carriers, some of the datasets were re-run and sent to Oliver Wyman.

Oliver Wyman analyzed the data for each company separately. Additional investigation revealed that several datasets had incomplete or inconsistent data even after several attempts to obtain explanations or revised data from the carriers. Because of these data issues, certain carriers are excluded from certain sections of the analysis. We have maintained a consistent set of carriers within each analysis to ensure comparability of results (unless otherwise noted). For example, within the historical premium trends analysis (section C.3) a common set of carriers was maintained throughout the analyses in that section.

Beneficiaries

The beneficiaries described in the Beneficiaries section may reside inside or outside of Massachusetts. Most often beneficiaries are located outside of Massachusetts when they are covered by an employer that is located in Massachusetts but the covered employee works in a location outside of Massachusetts. These out-of-state beneficiaries have been included in all sections of this report for consistency with the premiums reported, which also include the out-of-state beneficiaries. For this section, we requested detailed membership data from the carriers for their fully insured business. For self-funded business, we requested only total member months by calendar year and the average employer size. In this section, we summarize the distribution of members by market segment.

Most Popular Plan Analysis

We asked the carriers to provide us with the most popular plan, based on membership volume, in each calendar quarter for each market segment. It is important to note that the most popular plan can be different in one market segment than another. Therefore, a portion of the difference in premiums for the most popular plan between segments can be attributed to differences in benefits.

We calculated an actuarial value for each of the plan designs provided. We did this by running each benefit design through our proprietary pricing model. Our model was calibrated to reflect the average claim level of the market in 2008. We calculated plan relativities by dividing each plan premium from the model by the plan premium for the richest plan that we reviewed.

To calculate the single and family premiums for the most popular plan, we asked the carriers to provide their base rates for the applicable plans and the rating factors that they apply to the base rates in order to generate a final premium rate. We also created a sample census for each segment that closely resembles the overall membership of the segment. For the individual segment, we selected an age and gender that was representative of the average of a group of individuals rather than basing the analysis only on one age and gender. Because the sample census is different for each segment, the premiums for the most popular plan differ by segment in part due to the differences in age, gender, and average contract size of the population. Among the three group segments, the populations are very similar in average age and gender. However, the populations reflect the slightly higher average contract size for larger groups. For example, large group premiums for most carriers are about two percent higher than mid-size group premiums due to the increased average contract size.

We assumed that all segments had an industry rating factor of 1.0, consistent with the average. We excluded pre-merger individual products from this analysis. The premiums reflect the Boston region.

Lowest-Cost Plan Analysis

The methodology for performing the analysis of the lowest-cost plan was similar to the methodology for the most popular plan. The primary difference was in the selection of the plan design. We asked the carriers to provide the lowest-cost plan offered to each market segment in each calendar quarter during the study period. In most cases, the lowest-cost plan is the same across all market segments for a given carrier. Therefore, the difference in premium is primarily driven by differences in the sample censuses, and differences in rating practices by the carriers across market segments. There is, however, one carrier whose lowest-cost plan differs by market segment for a portion of the study period.

Non-Medical Expenses

In 2008, Oliver Wyman produced a report for the Division of Insurance entitled "Analysis of Administrative Expenses for Health Insurance Companies in Massachusetts." The analysis was performed using published annual financial statements. Non-medical expenses include: (1) general administrative expenses, (2) contribution to surplus or profit, and (3) broker commissions. Medical spending includes payments for covered health care services. Services such as disease management and case management may be categorized within either medical or non-medical spending. We have updated the analysis that was completed for the Division of Insurance study with data from the 2008 annual statutory financial statements of the applicable companies.

For the carrier pricing analysis, we asked the carriers to provide their pricing retention and its components as a percentage of premium and as an amount PMPM. Some carriers only provided the retention in one format. In these cases, we used the reported premiums and membership to estimate the other format. We note that some carriers were unable to provide a reliable estimate of the components of retention by segment and were not included in this analysis.

Historical Premium Rate Analysis

We asked the carriers to provide their annual premiums by market segment for 2005 through 2008. We also asked the carriers to provide their rating factors that were in use in second quarter 2007 (just prior to the merger of the individual and small group markets) and currently, as well as member months by age, gender, contract type, area, group size, and industry. Using the annual premiums and aggregate annual member months, we were able to calculate unadjusted premiums PMPM.

Next, we adjusted the annual premiums by age and gender, area, and benefits. We did not adjust by industry because we were missing industry classifications for a large part of the membership.

We performed each adjustment by first adjusting the rating factors of each carrier to make each carrier's factors relative to a common demographic. For example, we made the age/gender factors relative to a 45-year-old male by recalculating each carrier's factors to be equal to the factor provided divided by the 45-year-old male factor for that carrier. We made the area factor relative to Boston. We then calculated the weighted average adjusted rating factor for each calendar quarter. Then we calculated a weighted average factor for each calendar year.

Generally, in calculating the annual weighted average factor we used the factors in effect during second quarter 2007 for the first two quarters of 2007 and prior, and the current factors for the last two quarters of 2007 and later, provided the change in the factor was not dramatic. Finally, we divided the unadjusted premiums for each carrier by the average rating factors to develop expected premiums PMPM, adjusted to the demographics represented by the 1.0 factors.

We note that for this analysis, we applied the rating factors to mid-size and large groups that would apply if the premium were based only on a manual rate and not on the group's own experience. In the market, actual premiums would be based on a combination of the manual rate and an experience rate with the proportion of each depending on the group's size. The largest groups are typically rated based entirely on their own experience. Therefore, we are making the assumption that actual experience will follow the claim pattern assumed in the manual rating factors. Actual premiums may differ.

Finally, we excluded the individual market from the adjusted premium analyses. Several carriers did not provide the necessary data to complete the analysis, and this was not the primary focus of the report.

Adjusting the premiums for benefits required a separate analysis from the one described above for the other rating factors. In the mid-size and large group segments, carriers generally allow groups to customize their benefit designs. This leads to a volume of unique benefit designs that is not feasible to analyze in the manner that was done for other rating factors. To estimate the average benefit relativities, we relied on the claims data that was provided in response to Section II of the data request. We note that because Section II claims were only provided for members that are residents of Massachusetts, there are some members included in our premium analysis for whom there is no claims experience available. In addition, since Section II claims data were provided only for calendar years 2006 through 2008, we had to limit the premium analysis to

that same time period. Finally, any carriers that were excluded from the claims analysis because of data issues with the Section II claims data were also excluded from this analysis. For each carrier and each calendar year we calculated the ratio of paid claims to allowed claims, which provides a measure of the amount of claims that are paid by the carrier. We then used the Oliver Wyman proprietary pricing model to estimate the actuarial value of benefits for a given paid to allowed claims ratio. We divided the unadjusted premiums by the estimated actuarial values to determine the premiums adjusted for benefits.

Endnotes

[1] From 2005 to 2008, employee contributions to (single) coverage in Massachusetts increased 21 percent across all firm sizes, and 35 percent among employees in firms with fewer than 50 employees. See: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, State and Metro Level Data [Available at: http://www.meps.ahrq.gov/mepsweb/survey_comp/Insurance.jsp].

[2] See, for example: Katherine Baicker and Amitabh Chandra, The Labor Market Effects of Rising Health Insurance Premiums. Journal of Labor Economics 24(3), 2006: 609-634.

[3] See, for example: Philip Cooper and Barbara Schone, "More Offers, Fewer Takers for Employment-Based Health Insurance: 1987 and 1996," Health Affairs (November/December 1997): 142–149.

[4] For purposes of this report, commercial markets include individual and group insurance, both insured and self-insured. Medicare Advantage, Medicare supplement, Medicaid, Commonwealth Care, and non-medical lines of business are excluded.

[5] Oliver Wyman prepared the information presented in this report for the sole use of the Massachusetts Division of Health Care Finance and Policy (DHCFP). Distribution to parties other than DHCFP does not constitute advice by Oliver Wyman to those parties. This report should not be distributed to other parties unless it is distributed in its entirety. The reliance on any aspect of this report by parties other than DHCFP is not authorized by Oliver Wyman and is done at their own risk.

[6] The analysis in this report relies on extensive premium, claims, and membership data submitted by the major Massachusetts health plans. These data were reviewed for reasonableness, but they were not audited. Of course, to the extent the data are incomplete or inaccurate the findings are compromised. When not consistent across years, membership data provided by some carriers were eliminated from the analysis. Participating carriers for most analyses included: Aetna Health, Inc., Aetna Life Insurance Company, Blue Cross Blue Shield of Massachusetts, Inc., Blue Cross Blue Shield of Massachusetts HMO Blue, Inc., CIGNA HealthCare of Massachusetts, Inc., ConnectiCare of Massachusetts, Inc., Fallon Community Health Plan, Harvard Pilgrim Health Care, Inc., Health New England, Inc., Mid-West National Life Insurance Company of Tennessee, Neighborhood Health Plan, The Chesapeake Life Insurance Company, The MEGA Life and Health Insurance Company, Tufts Associated Health Maintenance Organization, Inc. (d/b/a Tufts Health Plan), and UnitedHealthcare of New England, Inc.

[7] Throughout this report, insurance segments labeled as "small group" exclude individuals in the merged market. When individuals and small groups have been combined, they are referred to as the "merged market." The insurance segments are defined as follows: Individuals are those who purchase coverage directly (not through an employment relationship); small groups are those with one to 50 eligible employees (and are defined by Massachusetts Division of Insurance Regulation 211 CMR 66.04); mid-size groups are those with 499 or fewer enrolled employees, and do not meet the definition of a small group; large groups are those with 500 or more enrolled employees.

[8] DHCFP, Health Care in Massachusetts: Key Indicators, May 2009 shows an increase in private enrollment of 190,000 members from June 30, 2006 to December 31, 2008. This report is available at http://www.mass.gov/Eeohhs2/docs/dhcfp/r/pubs/09/Key_Indicators_May_09.pdf.

[9] The increase in the average size of self-insured groups from 2006 to 2007 was driven primarily by a large increase in the average size of one carrier's self-insured groups. Of the six carriers included in this analysis, two experienced a decrease in average self-insured group size from 2006 to 2007 while the other four experienced increases in average self-insured group size.

[10] This estimate is based on monthly enrollment as reported in the Commonwealth Health Connector Board meeting materials obtained from: http://www.mahealthconnector.org/portal/site/connector/menuitem.be34eb79b090a7635734db47e6468a0c/?fiShown=default; Accessed 7/28/2009.

[11] Others have noted the "graying" of private group insurance nationally and the resulting impact on premiums. See: Patricia Seliger Keenan, David M. Cutler and Michael Chernew. The 'Graying' of Group Health Insurance. Health Affairs 25(6), 2006: 1497-1506 [Available at: http://content.healthaffairs.org/cgi/content/full/25/6/1497].

[12] "Contract" is synonymous with "subscriber." The average contract size is the number of subscribers and dependents covered per subscriber.

[13] The growth in premium PMPM and Tables B.1 and B.2 are derived from Massachusetts carriers' annual statutory financial statements for comprehensive major medical products.

[14] A number of factors could explain changes in insured-market loss ratios following reform—including carrier pricing to preserve (or expand) share in the newly merged market; pent-up demand among individuals who gained coverage; opportunistic, enrollment among individuals who take individual coverage to cover immediate health care needs and then drop it; and/or "cherry picking" into the self-insured market. Exploring whether any or all of these occurred was beyond the scope of this study.

[15] Rating regulations that apply to the merged market limit the difference in premium that can be charged based on group size. The highest rating factor allowed for group size is approximately 16 percent higher than the lowest factor. Consequently, carriers that are using the maximum rate differential cannot further increase premiums charged to individuals without also increasing premiums charged to small groups.

[16] The actuarial value is a measure of the relative richness of a benefit plan. All else equal, the higher the actuarial value, the lower the patient's cost sharing. In this analysis, the actuarial value for the richest plan offered by any carriers submitting data was set equal to 1.00. This plan included very little patient cost sharing.

[17] The plans discussed in this section were the lowest-cost plans offered in each market segment, but they do not necessarily have membership in each market segment.

[18] Carriers were asked to limit their responses to questions about product offerings to those that would have met the 2009 MCC requirements. The plan with the $3,000 deductible was included because it is HSA compatible and therefore meets the MCC requirements. It is unclear whether all carriers considered their HSA plan options when determining the lowest-cost plan.

[19] Note that this lowest-cost plan is not reflected in Table C.4; that is, this carrier's plans were not the minimum, median, or maximum lowest-cost plans in any segment.

[20] Note that no explicit adjustments have been made to reflect differing retention percentages by benefit design. At least one carrier in the study applies different retention percentages to different benefit designs. This is likely a reflection of fixed administrative expenses, such as the cost of group and member enrollment, that do not vary by benefit design and therefore would represent a larger percentage of premiums for less rich benefit plans than more rich plans.

[21] As codified in 211 CMR 66.08, individuals in the merged market may be charged up to 15.8 percent more than small groups with similar demographics. The allowable group size range is 0.95 to 1.10. On a percentage basis, the range from 0.95 to 1.10 is equal to a premium difference of 15.8 percent.

[22] Trend rates were calculated using un-rounded PMPM amounts and not the rounded amounts shown in Table C.5.

Appendix

Figure A.1: Enrollment in Private Comprehensive Health Insurance Products by Insurance Market Sector, 2006-2008

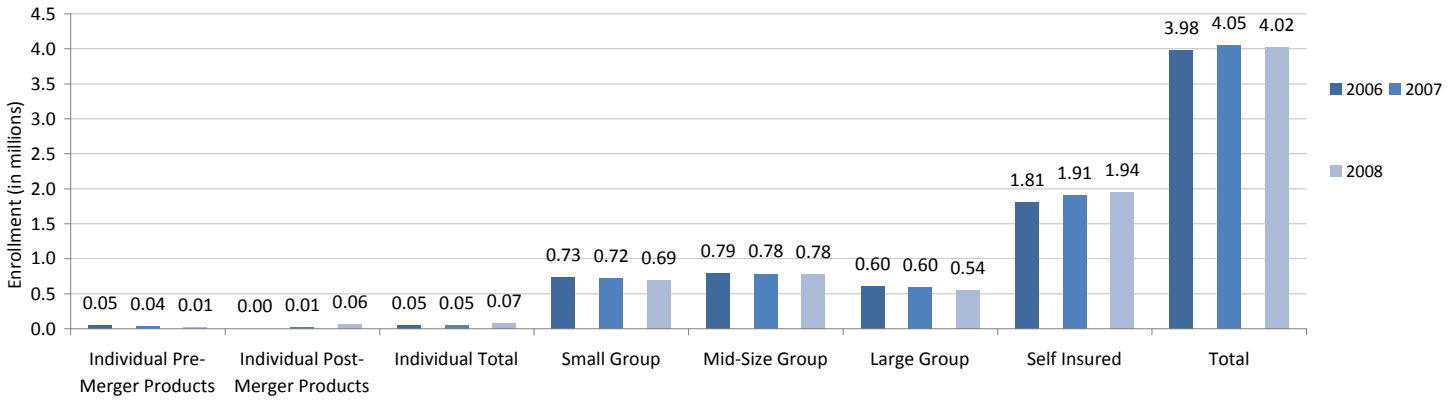

Table A.1: Total Member Months and Distribution of Enrollment in Private Comprehensive Health Insurance Products, 2006-2008

	2006		2007		2008	
	Member Months (in millions)	Percent of Member Months	Member Months (in millions)	Percent of Member Months	Member Months (in millions)	Percent of Member Months
Individual	0.6	1.3%	0.6	1.2%	0.9	1.8%
Small Group	8.7	18.3%	8.6	17.7%	8.2	17.1%
Mid-Size Group	9.5	19.9%	9.4	19.3%	9.3	19.3%
Large Group	7.2	15.1%	7.1	14.7%	6.5	13.5%
Self Insured	21.7	45.4%	22.9	47.1%	23.3	48.4%
Total	47.8	100.0%	48.6	100.0%	48.3	100.0%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Average group size is based on the number of enrolled subscribers (employees) per employer group.

Figure A.2: Average Group Size by Insurance Market Sector, 2006-2008

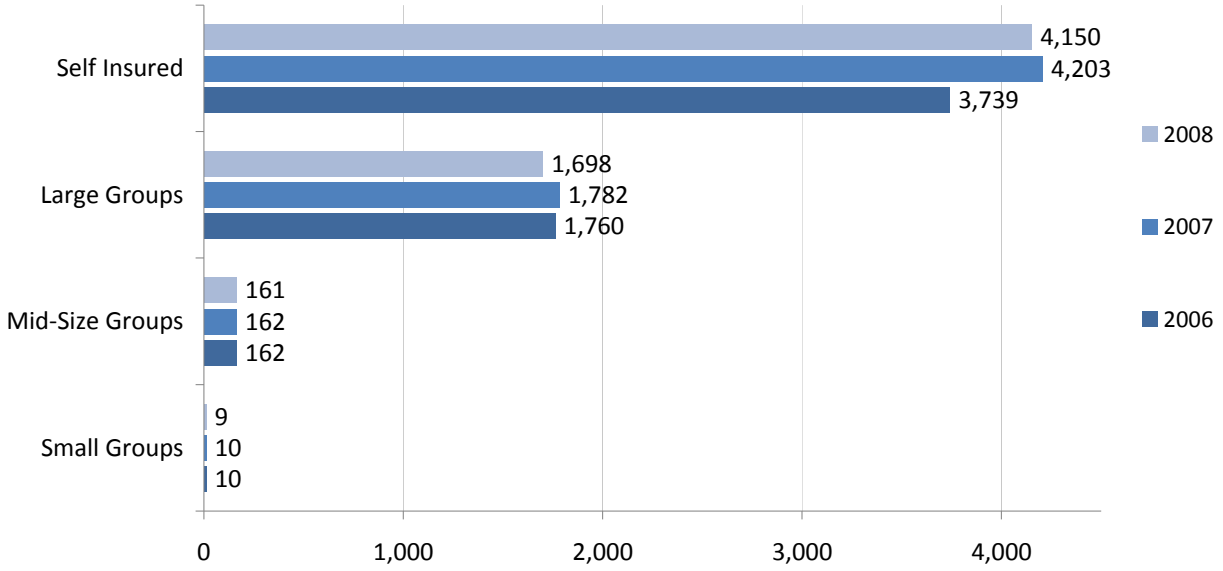

Figure A.3: Average Age in Private Comprehensive Health Insurance Products by Insurance Market Sector, 2005-2008

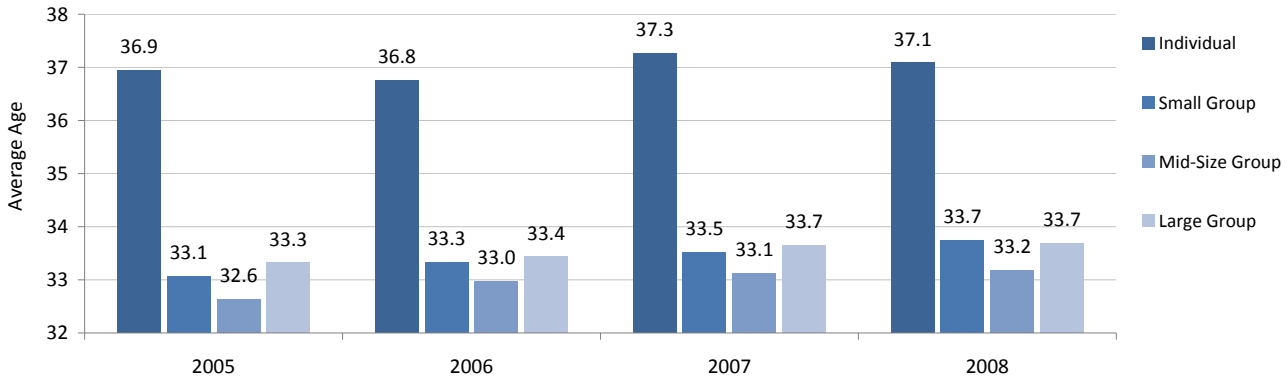

Table A.2: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Age and Gender, 2008

	Individual			Small Group			Mid-Size Group			Large Group		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Total	47.3%	52.7%	100.0%	51.1%	48.9%	100.0%	49.4%	50.6%	100.0%	47.6%	52.4%	100.0%
0-19	9.2%	8.8%	18.0%	14.2%	13.6%	27.8%	14.3%	13.6%	27.9%	14.4%	13.7%	28.1%
20-29	9.7%	9.2%	18.8%	7.0%	6.4%	13.4%	6.7%	7.5%	14.2%	6.2%	7.5%	13.7%
30-39	7.6%	7.6%	15.2%	7.4%	7.2%	14.6%	8.0%	8.5%	16.5%	7.1%	8.3%	15.4%
40-49	8.5%	8.8%	17.3%	10.3%	10.0%	20.3%	9.4%	9.8%	19.2%	8.5%	9.8%	18.2%
50-59	7.7%	9.9%	17.7%	8.7%	8.4%	17.1%	7.5%	7.9%	15.5%	7.5%	8.9%	16.3%
60-64	4.2%	7.7%	11.9%	2.9%	2.9%	5.8%	2.3%	2.4%	4.7%	2.6%	3.0%	5.6%
65+	0.4%	0.7%	1.0%	0.6%	0.5%	1.1%	1.1%	0.9%	2.1%	1.4%	1.2%	2.6%
Average Age	35.4	38.6	37.1	33.7	33.8	33.7	33.0	33.4	33.2	33.1	34.2	33.7

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.
Note: Enrollment is measured as member months.

Figure A.4: Average Number of Members per Contract, 2005-2008

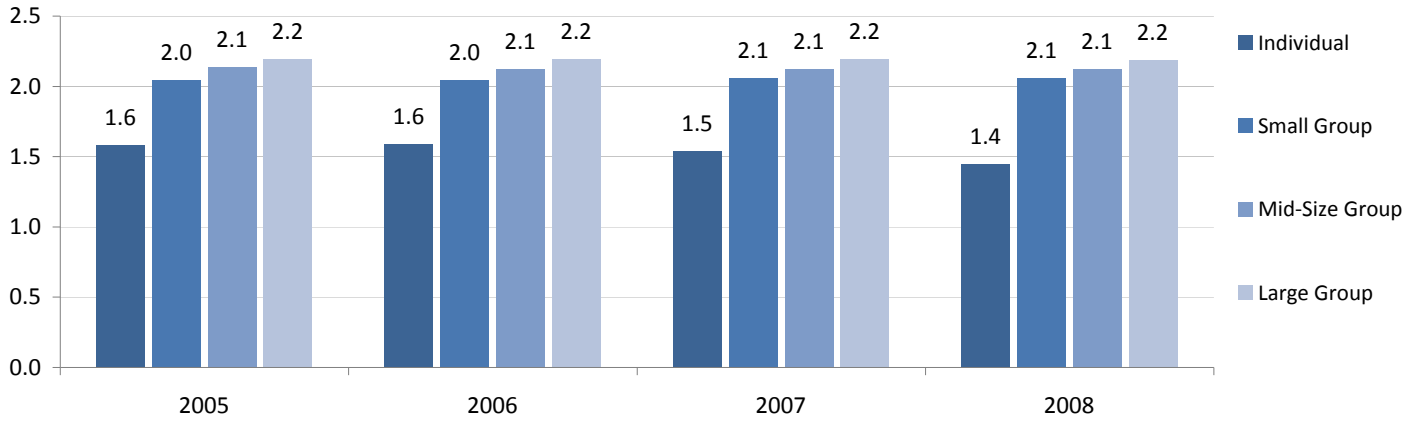

Figure A.5: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Region, 2008

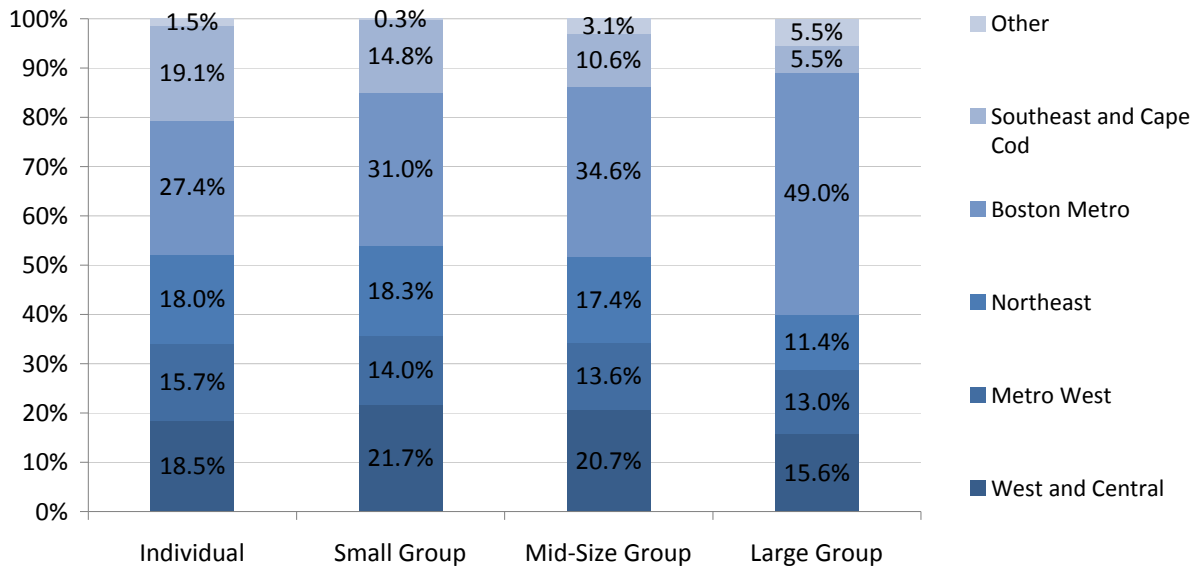

Table A.3: Percent Distribution of Enrollment in Private Comprehensive Health Insurance Products by Industry, 2008

Industry Classification	Small Group	Mid-Size Group	Large Group
Agriculture, Forestry and Fishing	1%	0%	0%
Mining	0%	0%	0%
Construction	9%	3%	1%
Manufacturing	7%	13%	7%
Transportation, Communications, Electric, Gas, Sanitary Services	3%	4%	3%
Wholesale Trade	4%	3%	0%
Retail Trade	10%	7%	4%
Finance, Insurance and Real Estate	8%	7%	10%
Services	57%	55%	48%
Business Services	*13%*	*15%*	*8%*
Health Services	*7%*	*11%*	*15%*
Legal Services	*4%*	*2%*	*4%*
Educational Services	*1%*	*7%*	*15%*
Social Services	*3%*	*6%*	*1%*
Membership organizations	*13%*	*2%*	*0%*
Engineering, accounting, research, etc.	*10%*	*8%*	*4%*
Other Services	*6%*	*4%*	*1%*
Public Administration	0%	5%	24%
NonClassifiable Establishments	0%	2%	1%
Total	100%	100%	100%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Notes: Enrollment is measured as member months. Industry classification code was not provided for approximately 30 percent of the membership. Small group service enrollment in membership organizations (13 percent) purchase coverage through intermediaries.

Table B.1: Administrative Expenses Per Member Per Month for Comprehensive Major Medical Products, 2002-2008

	2002	2003	2004	2005	2006	2007	2008	Average, 2002 - 2008
Aetna Health Inc PA Corp	$26	$34	$34	$33	$40	$35	$39	$35
BCBS of MA	$26	$32	$31	$47	$57	$59	$57	$36
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	$31	$33	$36	$39	$34
BCBS of MA Consolidated	$26	$32	$31	$34	$38	$40	$43	$35
CIGNA Hlthcare of Massachusetts Inc	$31	$29	$38	$35	$43	$46	$51	$33
Connecticare of Massachusetts Inc	$25	$29	$33	$52	$52	$52	$59	$43
Fallon Community Health Plan Inc	$15	$19	$19	$24	$26	$30	$32	$23
Harvard Pilgrim Health Care Inc	$25	$25	$34	$47	$49	$45	$41	$37
Health New England Inc	$27	$29	$31	$33	$36	$36	$38	$33
Neighborhood Health Plan Inc	$16	$19	$24	$25	$27	$33	$32	$27
Tufts Associated HMO Inc	$22	$25	$32	$39	$49	$61	$54	$36
United Healthcare of New England Inc	$32	$36	$18	$20	$22	$25	$22	$26
Total	$25	$29	$31	$36	$40	$41	$42	$35

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	Average Annual
Aetna Health Inc PA Corp	30.5%	0.0%	-2.7%	21.1%	-13.1%	11.7%	6.9%
BCBS of MA	23.3%	-1.4%	49.7%	21.5%	3.7%	-2.9%	14.3%
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	8.8%	6.7%	8.8%	8.1%
BCBS of MA Consolidated	23.3%	-1.4%	8.3%	12.2%	6.1%	5.5%	8.7%
CIGNA Hlthcare of Massachusetts Inc	-6.3%	30.8%	-9.2%	22.8%	8.6%	10.9%	8.7%
Connecticare of Massachusetts Inc	17.1%	12.8%	56.9%	0.5%	-0.9%	13.3%	15.2%
Fallon Community Health Plan Inc	21.6%	1.6%	28.4%	7.1%	15.6%	5.6%	13.0%
Harvard Pilgrim Health Care Inc	2.0%	36.3%	37.2%	3.7%	-8.1%	-9.1%	8.7%
Health New England Inc	6.1%	8.2%	8.5%	6.0%	0.8%	6.8%	6.0%
Neighborhood Health Plan Inc	17.8%	28.5%	1.9%	10.5%	18.7%	-0.6%	12.4%
Tufts Associated HMO Inc	16.3%	28.8%	21.3%	26.0%	23.9%	-11.0%	16.7%
United Healthcare of New England Inc	14.0%	-49.9%	11.6%	9.0%	11.9%	-9.9%	-5.8%
Total	16.9%	9.5%	14.0%	12.6%	2.5%	1.4%	9.3%

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.
Note: Trend rates were calculated from un-rounded pmpm amounts (not shown).

Table B.2: Loss Ratios for Comprehensive Major Medical Products, 2002-2008

	2002	2003	2004	2005	2006	2007	2008	Average, 2002 - 2008
Aetna Health Inc PA Corp	79.9%	77.3%	77.1%	81.1%	78.6%	79.0%	80.8%	79.3%
BCBS of MA	85.1%	82.7%	84.7%	81.7%	80.7%	82.2%	86.2%	83.7%
BCBS of MA HMO Blue Inc	N/A	N/A	N/A	88.5%	89.9%	91.0%	90.8%	90.1%
BCBS of MA Consolidated	85.1%	82.7%	84.7%	87.0%	87.9%	89.0%	89.8%	87.0%
CIGNA Hlthcare of Massachusetts Inc	86.6%	91.3%	89.2%	74.3%	84.8%	88.6%	89.4%	87.3%
Connecticare of Massachusetts Inc	86.9%	83.3%	83.5%	74.6%	78.1%	79.7%	74.5%	79.7%
Fallon Community Health Plan Inc	90.0%	89.2%	89.8%	87.3%	90.2%	91.8%	90.9%	90.0%
Harvard Pilgrim Health Care Inc	86.9%	88.3%	86.7%	82.8%	84.4%	86.6%	87.4%	86.1%
Health New England Inc	87.9%	86.5%	86.2%	83.5%	85.2%	87.3%	87.1%	86.2%
Neighborhood Health Plan Inc	90.7%	85.4%	85.1%	90.9%	94.2%	96.0%	86.3%	89.8%
Tufts Associated HMO Inc	89.7%	88.3%	89.8%	85.7%	84.7%	84.4%	87.1%	87.4%
United Healthcare of New England Inc	79.4%	83.9%	74.8%	77.9%	75.1%	79.1%	77.9%	79.5%
Total	86.0%	85.0%	85.3%	85.1%	85.7%	86.8%	87.7%	86.0%

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.

Table B.3: Premium, Claims, and Loss Ratios in Private Comprehensive Health Insurance Products, 2005-2008

	2005			2006			2007			2008		
	Premiums (billions)	Claims (billions)	Loss Ratio	Premiums (billions)	Claims (billions)	Loss Ratio	Premiums (billions)	Claims (billions)	Loss Ratio	Premiums (billions)	Claims (billions)	Loss Ratio
Individual Pre-Merger Products	$0.3	$0.2	90.2%	$0.3	$0.2	95.3%	$0.2	$0.2	96.3%	$0.1	$0.1	95.4%
Individual Post-Merger Products	na	na	na	na	na	na	$0.1	$0.1	105.4%	$0.2	$0.3	112.0%
Individual Total	$0.3	$0.2	90.2%	$0.3	$0.2	95.3%	$0.3	$0.3	98.2%	$0.3	$0.4	107.5%
Small Group	$2.5	$2.1	84.3%	$2.7	$2.4	86.7%	$2.9	$2.5	86.6%	$2.9	$2.5	86.1%
Merged Market Total	na	na	na	na	na	na	$2.9	$2.6	86.9%	$3.2	$2.8	88.1%
Mid-Size Group	$2.8	$2.4	85.1%	$3.0	$2.6	86.9%	$3.1	$2.7	87.7%	$3.2	$2.9	88.0%
Large Group	$2.3	$2.0	88.0%	$2.4	$2.1	89.1%	$2.5	$2.3	90.0%	$2.4	$2.2	89.6%
Total	$7.8	$6.7	85.9%	$8.3	$7.3	87.7%	$8.8	$7.8	88.3%	$8.9	$7.9	88.6%

Source: Oliver Wyman analysis of Massachusetts carriers' annual statutory financial statements.

Note: Only carriers included in Chapter 3 are included in this analysis. The total loss ratio calculated for these carriers is slightly higher than for carriers that reported premium and cost information, as reported in Table II.B.2. In addition, differences in the data sources (reporting to the Division versus carriers' financial statements) may produce some differences in the estimates.

Figure B.1: Loss Ratios by Insurance Market Sector, 2008

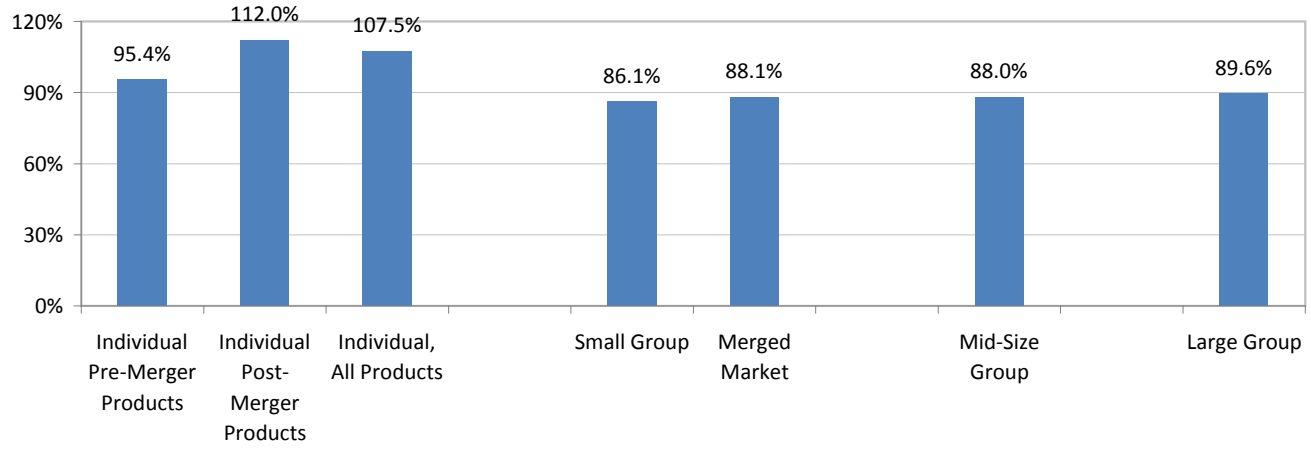

Figure B.2: Small Group Retention Per Member Per Month as a Percent of Large Group Retention per Member per Month Adjusted for All Rating Factors, 2006-2008

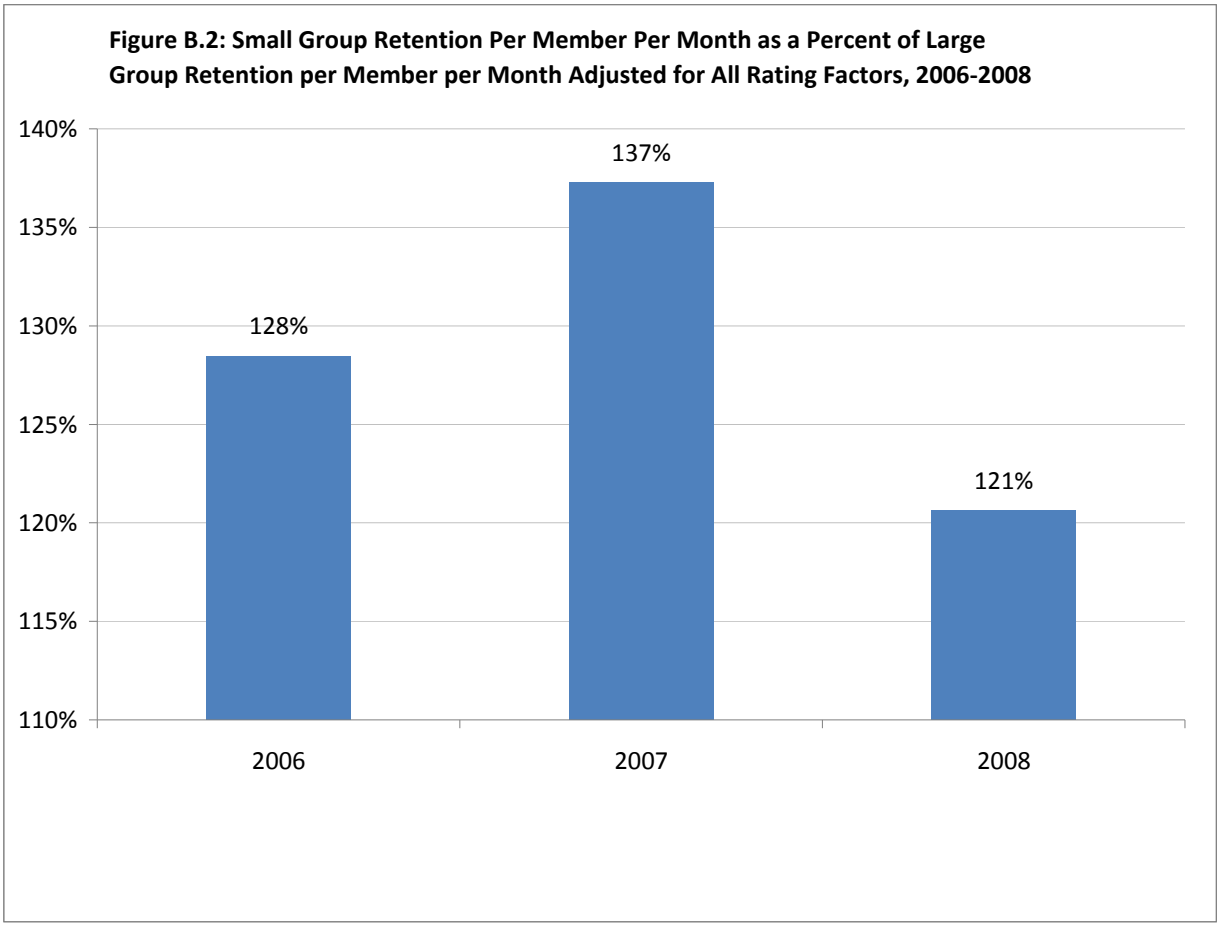

Table B.4: Estimated Average Annual Growth in Retention PMPM Adjusted for All Rating Factors by Insurance Market Sector, 2006-2008

	2006 - 2007	2007 - 2008	Average Annual Growth 2006 - 2008
Small Group	5.5%	-3.9%	1.4%
Mid-Size Group	-0.9%	2.0%	1.2%
Large Group	-1.3%	9.4%	8.0%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Table C.1: Most Popular Benefit Plans in Private Comprehensive Health Insurance Products, 2006-2008

	2007			2008		
Individual Post-Merger	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.578	0.694	0.726	0.635	0.726	0.860
Deductible	$2,000	$2,000	$2,000	$2,000	$2,000	None
Coinsurance	N/A	N/A	N/A	N/A	N/A	N/A
PCP Office Visit	$35	$25	$25	$35	$25	$25
SPC Office Visit	$50	$25	$25	$50	$25	$25
Inpatient Copay	Deductible	Deductible	$500	Deductible	$500	$800
Outpatient Surgery Copay	Deductible	Deductible	$250	Deductible	$250	$250
Emergency Room Copay	$200	$100	$75	$200	$75	$100
Pharmacy Deductible	n/a	None	None	$250	None	None
Retail Generic	n/a	$10	$10	$20	$10	$15
Retail Preferred	n/a	$50	$30	$50	$30	$30
Retail Non-Preferred	n/a	$100	$60	$75	$60	$50

	2006			2007			2008		
Small Group	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.747	0.907	0.970	0.747	0.898	0.970	0.747	0.882	0.954
Deductible	$1,000	None	None	$1,000	None	None	$1,000	None	None
Coinsurance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCP Office Visit	$20	$10	$10	$20	$15	$10	$20	$20	$10
SPC Office Visit	$20	$25	$10	$20	$15	$10	$20	$20	$10
Inpatient Copay	Deductible	$500	$0	Deductible	$350	$0	Deductible	$500	$175
Outpatient Surgery Copay	Deductible	$250	$0	Deductible	$350	$0	Deductible	$250	$50
Emergency Room Copay	$100	Deductible	$50	$100	$50	$50	$100	$75	$50
Pharmacy Deductible	$250	None	None	$250	None	None	$250	None	None
Retail Generic	$10	$10	$5	$10	$10	$5	$10	$15	$10
Retail Preferred	$30	$25	$15	$30	$25	$15	$30	$30	$20
Retail Non-Preferred	$50	$45	$35	$50	$45	$35	$50	$50	$35

	2006			2007			2008		
Mid-Size Group	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.907	0.917	0.970	0.882	0.907	0.970	0.873	0.882	0.917
Deductible	None	None	None	None	None	None	None	None	None
Coinsurance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCP Office Visit	$10	$15	$10	$20	$10	$10	$20	$20	$15
SPC Office Visit	$25	$15	$10	$20	$25	$10	$20	$20	$15
Inpatient Copay	$500	$250	$0	$500	$500	$0	$500	$500	$250
Outpatient Surgery Copay	$250	$250	$0	$250	$250	$0	$250	$250	$250
Emergency Room Copay	not available	$50	$50	$75	Deductible	$50	$75	$75	$50
Pharmacy Deductible	None	None	None	None	None	None	None	None	None
Retail Generic	$10	$10	$5	$15	$10	$5	$15	$15	$10
Retail Preferred	$25	$20	$15	$30	$25	$15	$30	$30	$20
Retail Non-Preferred	$45	$35	$35	$50	$45	$35	$50	$50	$35

	2006			2007			2008		
Large Group	Minimum	Median	Maximum	Minimum	Median	Maximum	Minimum	Median	Maximum
Actuarial Value	0.914	0.944	1.000	0.914	0.928	1.000	0.838	0.915	1.000
Deductible	None	None	None	None	None	None	None	None	None
Coinsurance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PCP Office Visit	$20	$15	$0	$20	$15	$0	$25	$15	$0
SPC Office Visit	$30	$15	$0	$30	$15	$0	$25	$15	$0
Inpatient Copay	$100	$0	$0	$100	$250	$0	$1,000	$250	$0
Outpatient Surgery Copay	$100	$0	$0	$100	$75	$0	$500	$150	$0
Emergency Room Copay	$100	$50	$25	$100	$75	$25	$100	$75	$25
Pharmacy Deductible	None	None	None	None	None	None	None	None	None
Retail Generic	$10	$10	$5	$10	$5	$5	$15	$10	$5
Retail Preferred	$20	$20	$15	$20	$20	$15	$30	$30	$15
Retail Non-Preferred	$35	$35	$35	$35	$60	$35	$50	$50	$35

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Table C.2: Percent of Small Group Enrollees by Actuarial Value, 2005 - 2008

Actuarial Value	2005Q1	2005Q2	2005Q3	2005Q4	2006Q1	2006Q2	2006Q3	2006Q4	2007Q1	2007Q2	2007Q3	2007Q4	2008Q1	2008Q2	2008Q3	2008Q4
0.651 - 0.700	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
0.701 - 0.750	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
0.751 - 0.800	6%	6%	6%	5%	5%	5%	4%	5%	5%	5%	4%	4%	4%	5%	6%	10%
0.801 - 0.850	10%	9%	9%	10%	10%	9%	10%	10%	10%	11%	11%	12%	13%	15%	17%	16%
0.851 - 0.900	14%	21%	22%	25%	28%	31%	35%	38%	41%	42%	46%	48%	53%	49%	47%	47%
0.901 - 0.950	46%	45%	44%	42%	44%	42%	40%	37%	36%	34%	31%	30%	27%	27%	26%	25%
0.951 - 1.000	22%	18%	17%	17%	12%	11%	10%	9%	8%	7%	6%	6%	4%	3%	3%	2%
Weighted Actuarial Value	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.89	0.88	0.88	0.87	0.87

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Figure C.1: Median Premiums Per Member Per Month for Single Coverage for the Most Popular Products by Insurance Market Sector 2005-2008

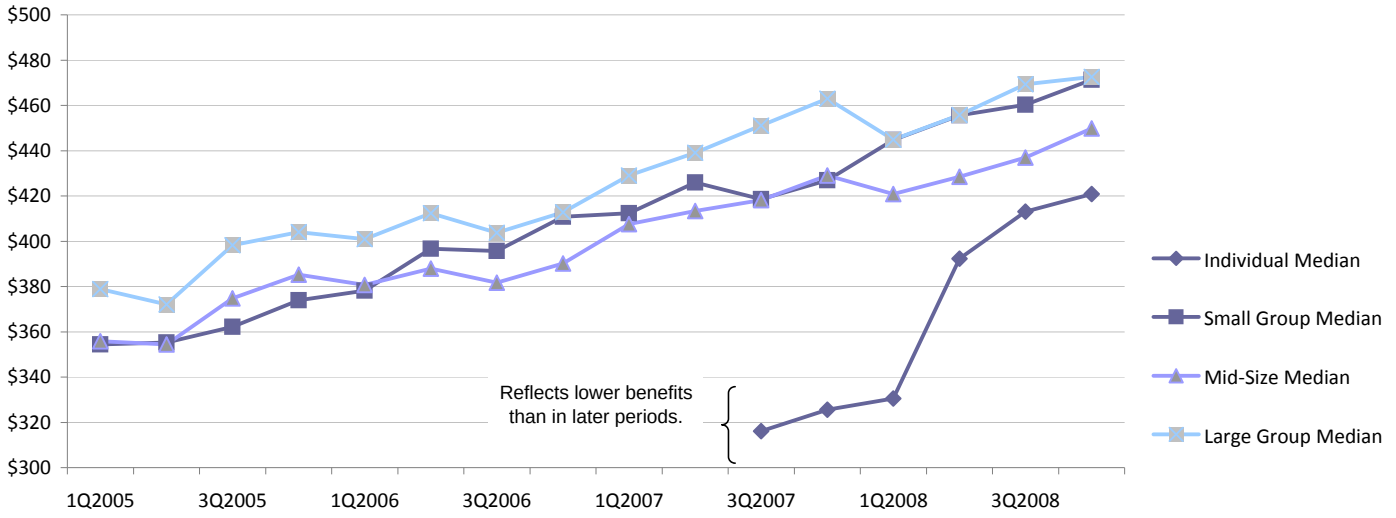

Table C.3: Percent of Enrollment in Most Popular Private Comprehensive Health Insurance Plan, 2005-2008

	1Q2005	3Q2005	1Q2006	3Q2006	1Q2007	3Q2007	1Q2008	3Q2008
Individual Post-Merger	n/a	n/a	n/a	n/a	n/a	18.0%	18.2%	17.1%
Small Group	30.2%	28.9%	25.9%	21.9%	23.8%	23.1%	20.6%	17.2%
Mid-Size Group	11.0%	10.7%	8.5%	8.7%	9.8%	9.9%	9.1%	7.0%
Large Group	11.7%	11.6%	11.6%	11.5%	12.0%	11.6%	12.1%	12.7%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Note: Large groups may have a higher percentage of enrollment in the most popular plan than mid-size groups due to a relatively small number of very large employers.

Table C.4: Lowest-Cost Private Comprehensive Health Insurance Products - All Sectors, 2006-2008[a]

	2006			2007			2008		
	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product	Minimum Product	Median Product	Maximum Product
Actuarial Value	0.474	0.702	0.860	0.474	0.702	0.860	0.474	0.646	0.726
Deductible	$3,000	$2,000	$0	$3,000	$2,000	$0	$3,000	$2,000	$2,000
Coinsurance	80%	N/A	N/A	80%	N/A	N/A	80%	80%	N/A
PCP Office Visit	$20	$20	$25	$20	$20	$25	$20	$25	$25
SPC Office Visit	$20	$20	$25	$20	$20	$25	$20	$25	$25
Inpatient Copay	Ded / Coins	Deductible	$800	Ded / Coins	Deductible	$800	Ded / Coins	Ded / Coins	Deductible
Outpatient Surgery Copay	Ded / Coins	Deductible	$250	Ded / Coins	Deductible	$250	Ded / Coins	Ded / Coins	Deductible
Emergency Room Copay	Ded / Coins	$75	$100	Ded / Coins	$75	$100	Ded / Coins	$100	$75
Pharmacy Deductible	$0	$0	$0	$0	$0	$0	$0	$100	$0
Retail Generic	$10	$10	$15	$10	$10	$15	$10	$15	$15
Retail Preferred	$25	$25	$30	$25	$25	$30	$25	50%	$30
Retail Non-Preferred	$40	$50	$50	$40	$50	$50	$40	50%	$50

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Notes: The actuarial value represents the premium charged for a given plan relative to the richest plan that was included in the analysis, a plan with very little member cost sharing. The richest plan has an actuarial value of 1.0. The benefits that appear in the table are the benefits associated with the plan with the actuarial value shown.

[a] The minimum, median, and maximum benefit plan are the same for all insured market sectors, excluding individuals pre-merger (not shown).

Figure C.2: Median Premiums for the Lowest-Cost Single Coverage by Insurance Market Sector, 2005-2008

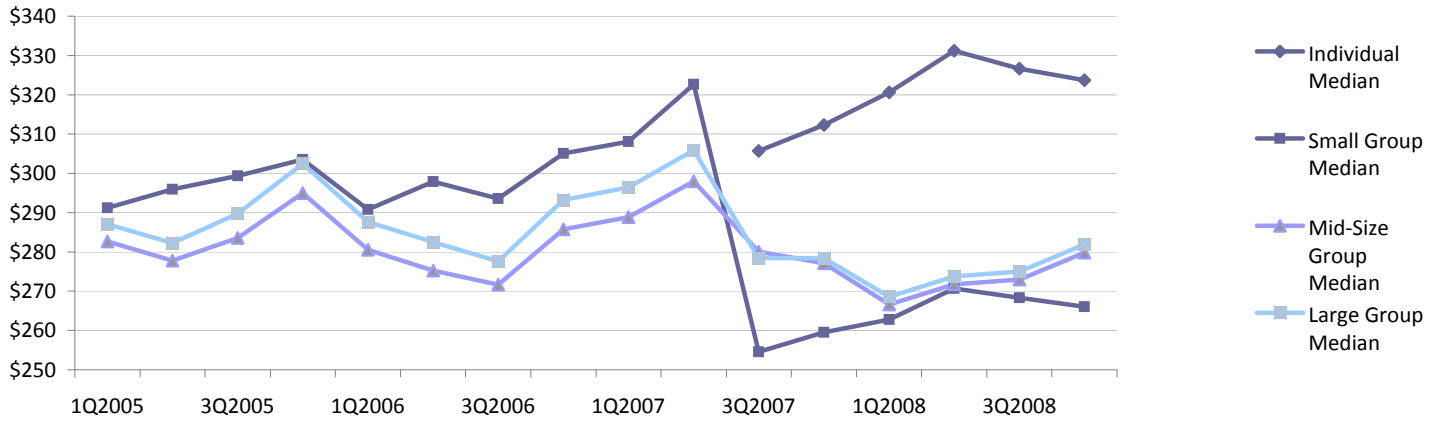

Figure C.3: Single Premiums for the Lowest Cost Plan and Most Popular Plan: 4Q2008

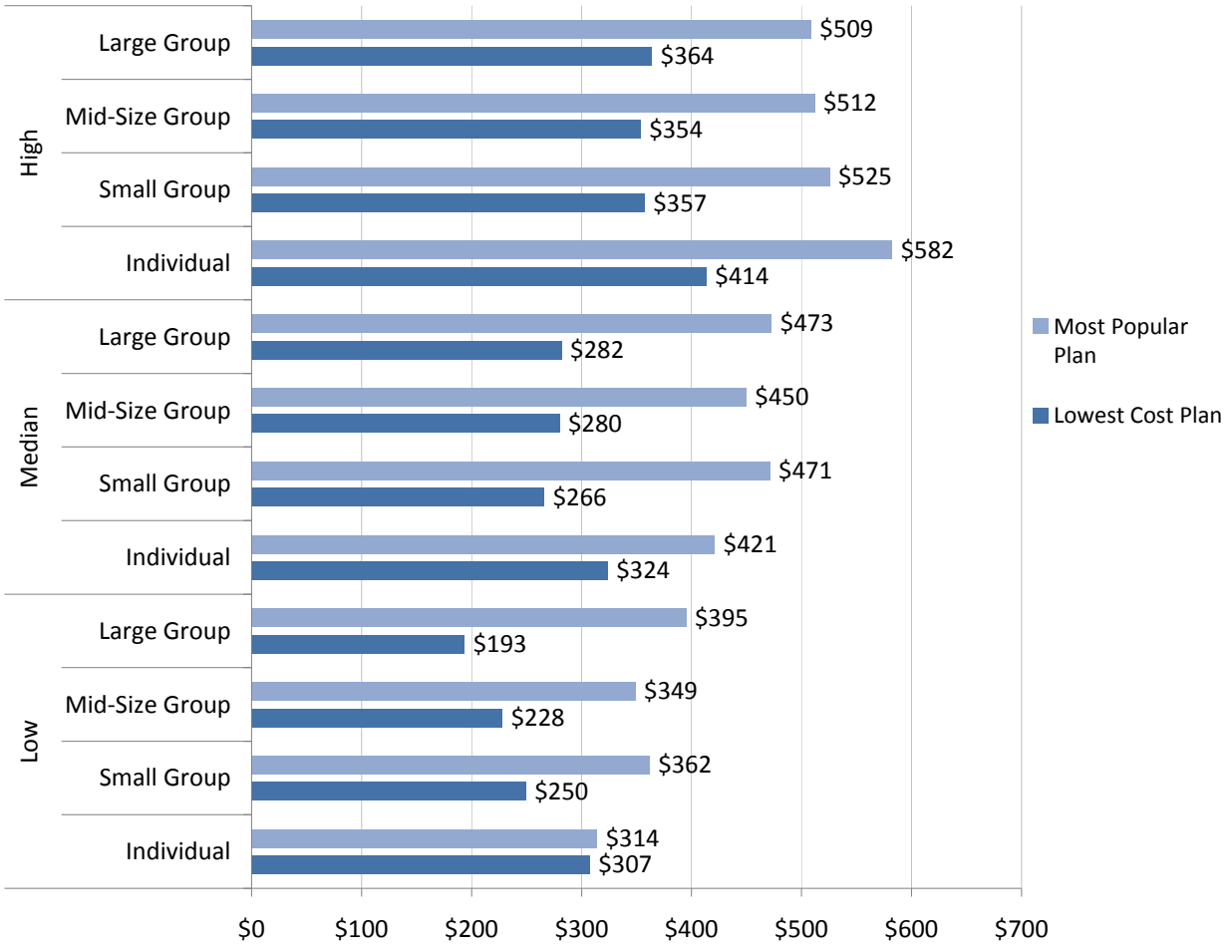

Figure C.4: Unadjusted Premiums per Member per Month by Insurance Market Sector, 2006-2008

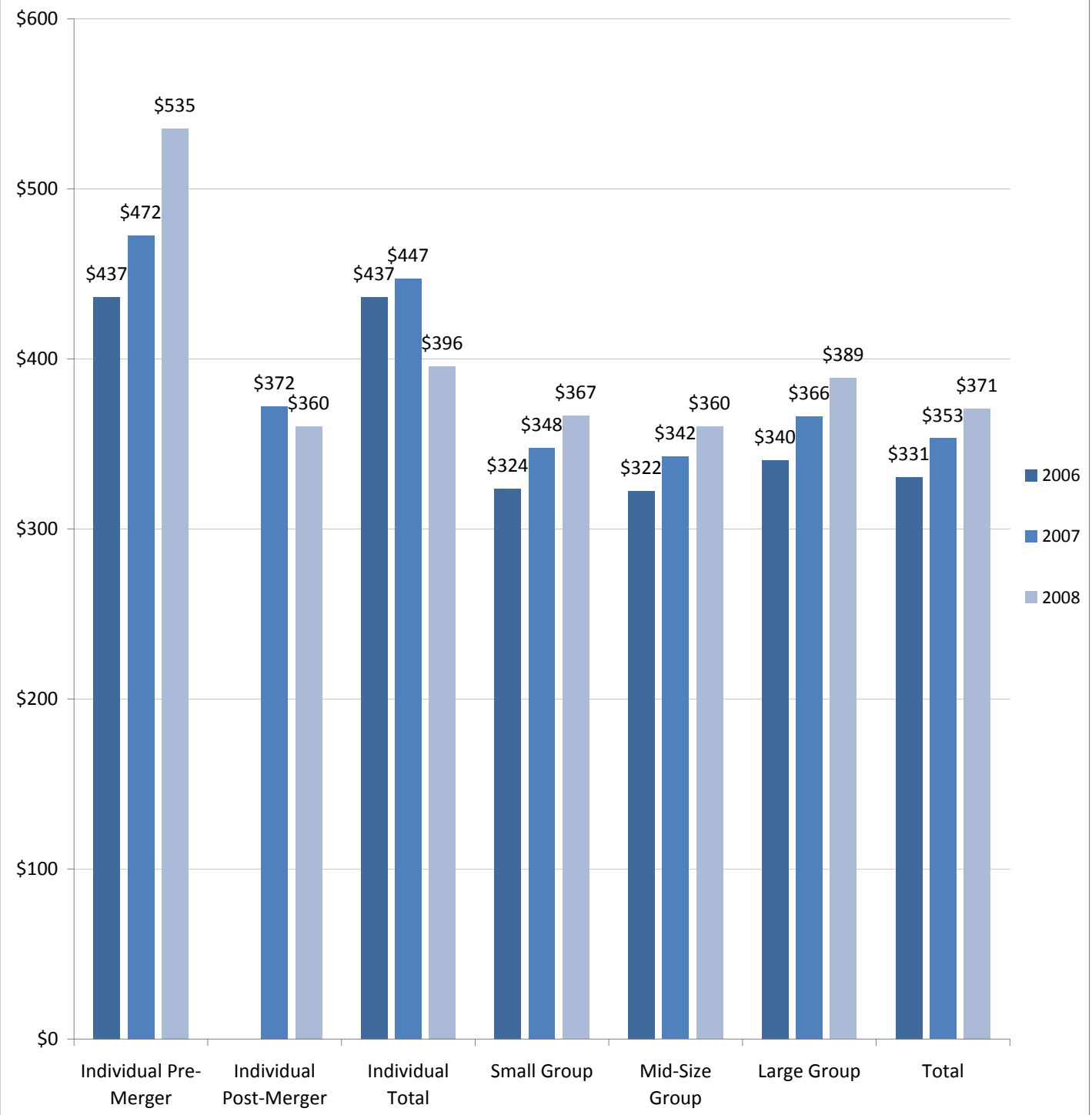

Table C.5: Unadjusted and Adjusted Premiums PMPM, and Percent Change in Premiums for Private Comprehensive Health Insurance Products, 2006-

Unadjusted Premium PMPM

	Premium PMPM			Percent Change	
	2006	2007	2008	2006-2007	2007-2008
Small Group	$324	$348	$367	7.4%	5.4%
Mid-Size Group	$322	$342	$360	6.3%	5.2%
Large Group	$340	$366	$389	7.6%	6.1%

Adjusted for: *Age and Gender*

	Premium PMPM			Percent Change	
	2006	2007	2008	2006-2007	2007-2008
Small Group	$339	$363	$380	7.1%	4.7%
Mid-Size Group	$340	$361	$378	5.9%	4.7%
Large Group	$343	$368	$390	7.4%	5.8%

Adjusted for: *Geographic Area*

	Premium PMPM			Percent Change	
	2006	2007	2008	2006-2007	2007-2008
Small Group	$334	$358	$377	7.2%	5.2%
Mid-Size Group	$328	$349	$366	6.2%	5.1%
Large Group	$342	$369	$392	7.9%	6.1%

Adjusted for: *Benefits*

	Premium PMPM			Percent Change	
	2006	2007	2008	2006-2007	2007-2008
Small Group	$376	$407	$435	8.3%	6.9%
Mid-Size Group	$370	$394	$414	6.4%	5.3%
Large Group	$381	$409	$433	7.4%	5.9%

Adjusted for All Factors

	Premium PMPM			Percent Change	
	2006	2007	2008	2006-2007	2007-2008
Small Group	$406	$438	$464	7.8%	5.8%
Mid-Size Group	$398	$422	$442	5.9%	4.8%
Large Group	$387	$416	$438	7.5%	5.4%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.

Notes: Only carriers included in Chapter 3 were included in this analysis. Trend rates were calculated from un-rounded pmpm amounts (not shown).

Figure C.5: Decomposition of Premium PMPM Adjusted for All Rating Factors, 2008

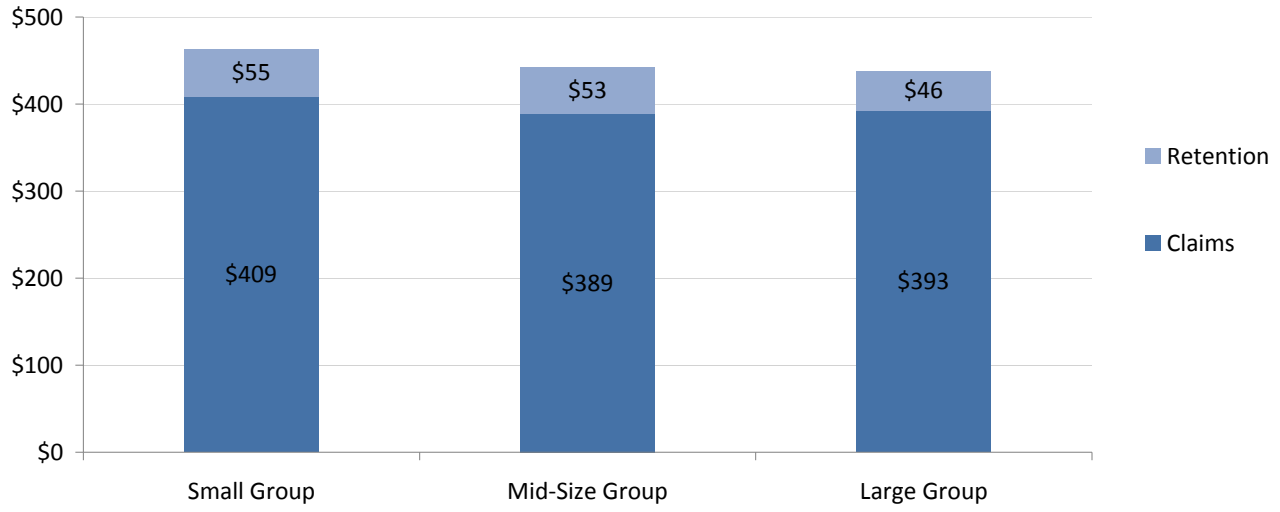

Table C.6: Median Monthly Premium Scenarios, Third Quarter 2008

	Median Premiums		Percent Change from Baseline		Renewal Rate Increase[a]	
	Individual	Family	Individual	Family	Individual	Family
Baseline Scenario: Six employees	$470	$1,250	N/A	N/A	6.0%	6.0%
Scenario 1: No change in employees; two employees age into next five-year age band	$488	$1,299	3.9%	3.9%	10.2%	10.2%
Scenario 2: One employee of roughly average age leaves the group	$513	$1,367	9.2%	9.3%	15.8%	15.9%
Scenario 3: One employee of roughly average age leaves the group; one employee ages into next five-year age band	$521	$1,389	11.0%	11.1%	17.6%	17.7%
Scenario 4: One employee retires; a 40-year old replacement is hired	$420	$1,118	-10.6%	-10.6%	-5.3%	-5.3%

	Median Premiums		Percent Change from Baseline		Renewal Rate Increase[a]	
	Individual	Family	Individual	Family	Individual	Family
Baseline Scenario: Twenty employees	$463	$1,239	N/A	N/A	6.0%	6.0%
Scenario 1: No change in employees; six employees age into next five-year age band	$484	$1,295	4.5%	4.5%	10.7%	10.7%
Scenario 2: Three employees of roughly average age leave the group	$464	$1,240	0.1%	0.1%	6.1%	6.1%
Scenario 3: Three employees of roughly average age leave the group; three employees age into next five-year age band	$477	$1,277	3.0%	3.0%	9.2%	9.2%
Scenario 4: One employee retires; a 40-year old replacement is hired	$444	$1,186	-4.3%	-4.3%	1.5%	1.5%

Source: Oliver Wyman analysis of data from Massachusetts carriers for resident and non-resident insured lives.
Note: Trend rates were calculated from un-rounded pmpm amounts (not shown).
[a] Renewal rate increase assumes a 6% increase prior to changes in demographics.

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